

*****SYTIME*****
*****CON*****
*****USE*****

F.A. PROJECT NO.

NOTES

ASSUMED LIVE LOAD -----HS20-44 OR ALTERNATE LOADING.

DESIGN FILL-----

FOR OTHER DESIGN DATA AND NOTES SEE STANDARD NOTE SHEET.

3"Ø WEEP HOLES INDICATED TO BE IN ACCORDANCE WITH THE SPECIFICATIONS.

CONCRETE IN CULVERTS TO BE POURED IN THE FOLLOWING ORDER:

1. WING FOOTINGS AND FLOOR SLAB INCLUDING 4"
OF ALL VERTICAL WALLS.

2. THE REMAINING PORTIONS OF THE WALLS AND WINGS FULL
HEIGHT FOLLOWED BY ROOF SLAB AND HEADWALLS.

THE RESIDENT ENGINEER SHALL CHECK THE LENGTH OF CULVERT BEFORE
STAKING IT OUT TO MAKE CERTAIN THAT IT WILL PROPERLY TAKE CARE
OF THE FILL.

THIS BARREL STANDARD TO BE USED ONLY ON CULVERT ON 75° SKEW AND TO
BE USED WITH STANDARD WING SHEET WITH THE SAME SKEW AND VERTICAL
CLEARANCE.

DIMENSIONS FOR WING LAYOUT AS WELL AS ADDITIONAL REINFORCING STEEL
EMBEDDED IN BARREL ARE SHOWN ON WING SHEET.

TRANSVERSE CONSTRUCTION JOINTS SHALL BE USED IN THE BARREL, SPACED
TO LIMIT THE POURS TO A MAXIMUM OF 70 FT. LOCATION OF JOINTS SHALL
BE SUBJECT TO APPROVAL OF THE ENGINEER.

AT THE CONTRACTOR'S OPTION, HE MAY SPLICE THE VERTICAL REINFORCING STEEL
IN THE INTERIOR FACE OF EXTERIOR WALL ABOVE LOWER WALL CONSTRUCTION
JOINT. THE SPLICE LENGTH SHALL BE AS PROVIDED IN THE SPLICE LENGTH CHART
SHOWN ON THE PLANS. EXTRA WEIGHT OF STEEL DUE TO THE SPLICES SHALL
BE PAID FOR BY THE CONTRACTOR.

AT THE CONTRACTOR'S OPTION HE MAY SUBMIT TO THE ENGINEER FOR APPROVAL,
DESIGN AND DETAIL DRAWINGS FOR A PRECAST REINFORCED CONCRETE BOX CULVERT
IN LIEU OF THE CAST-IN-PLACE CULVERT SHOWN ON THE PLANS. THE DESIGN SHALL
PROVIDE THE SAME SIZE AND NUMBER OF BARRELS AS USED ON THE CAST-IN-PLACE
DESIGN. FOR OPTIONAL PRECAST REINFORCED CONCRETE BOX CULVERT, SEE SPECIAL
PROVISIONS.

LOCATION SKETCH

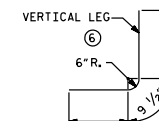
TOTAL STRUCTURE QUANTITIES	
CLASS A CONCRETE	
BARREL @ _____ CY/FT _____	C.Y.
WING ETC. _____	C.Y.
TOTAL _____	C.Y.
REINFORCING STEEL	
BARREL _____	LBS.
WINGS ETC. _____	LBS.
TOTAL _____	LBS.

PROJECT NO. _____

_____ COUNTY

STATION: _____

SHEET 1 OF 2



BAR TYPE
DIMENSIONS ARE OUT TO OUT

PROFILE ALONG C CULVERT

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
BARREL STANDARD
SINGLE FT. X FT.
CONCRETE BOX CULVERT
75° SKEW

AUGUST 1989

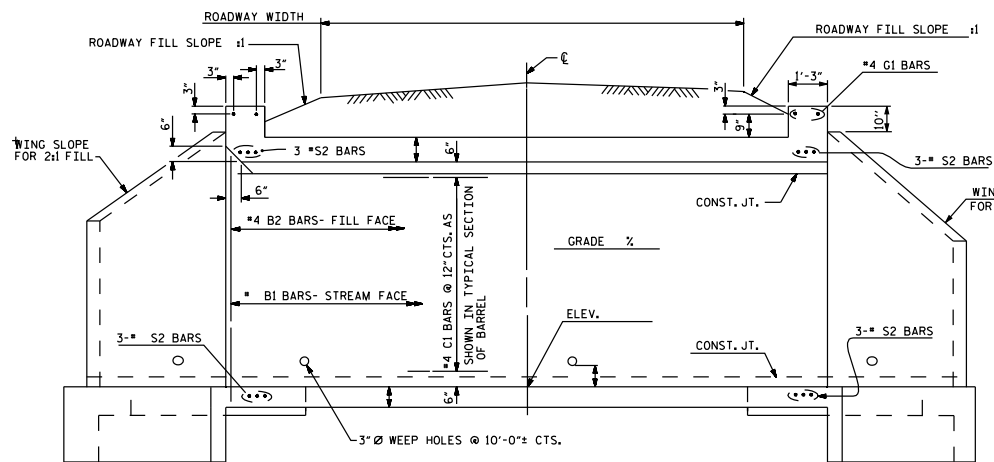
REVISIONS				SHEET NO.	
NO.	BY	DATE	NO.	BY	DATE
1			3		
2			4		
				TOTAL SHEETS	

STD. NO. CB21A

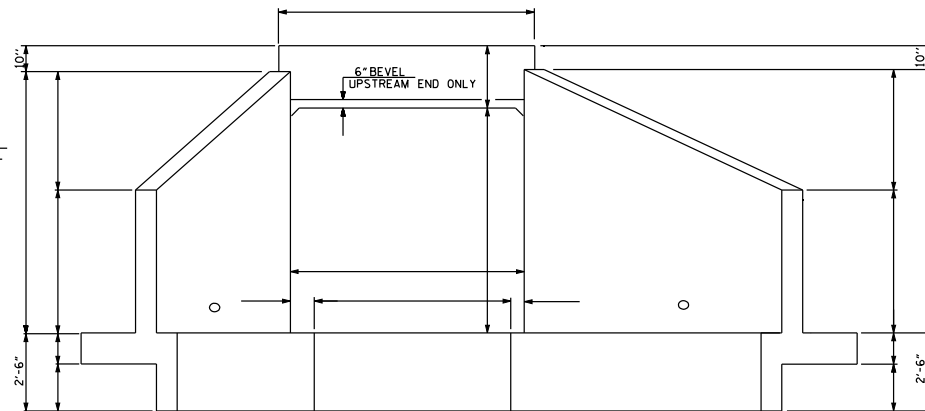
REVISED #13-91 BY E.L.R. CHECKED BY G.R.P.
ADDED 8-22-89

ASSEMBLED BY : _____	DATE : _____	SPECIAL
CHECKED BY : _____	DATE : _____	
DRAWN BY : R.W. WRIGHT	DATE : AUG. 1989	STANDARD
CHECKED BY : A.R. BISSETTE	DATE : AUG. 1989	

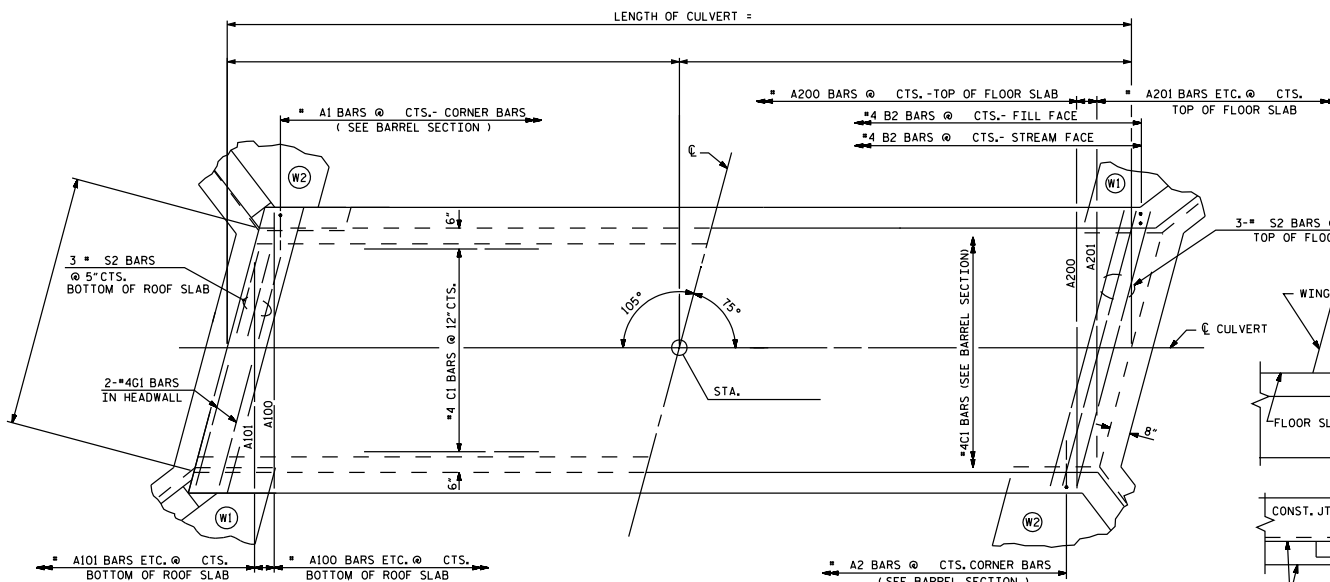
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CULVERT SECTION NORMAL TO ROADWAY

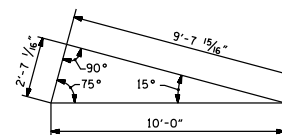


END ELEVATION NORMAL TO SKEW

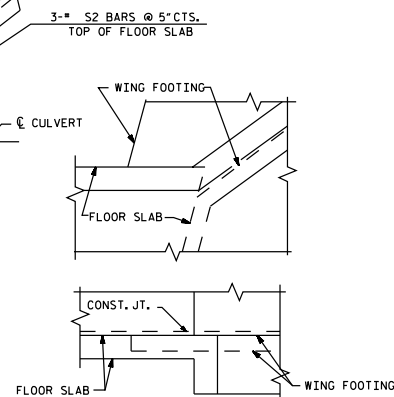


PART PLAN - ROOF SLAB

PART PLAN - FLOOR SLAB



SKEW TRIANGLE



DETAIL

CONNECTION OF WING FOOTING
 AND FLOOR SLAB WHEN SLAB
 IS THICKER THAN FOOTING

PROJECT NO. _____
 _____ COUNTY
 STATION: _____
 SHEET 2 OF 2

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH						
BARREL STANDARD SINGLE FT. X FT. CONCRETE BOX CULVERT 75° SKEW						
1971						
REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	TOTAL SHEETS
1			3			
2			4			
STD. NO. CB21						

REVISED 8-28-83 BY E.L.B. CHECKED BY C.B.P.
 REVISED 8-22-85 BY A.J.B. CHECKED BY C.A.K.
 REDRAWN 8-22-89

ASSEMBLED BY : _____	DATE : _____	SPECIAL
CHECKED BY : _____	DATE : _____	
DRAWN BY : S.A. TEDDER	DATE : AUG. 1989	STANDARD
CHECKED BY : A.R. BISSETTE	DATE : AUG. 1989	